

Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly with annotated starts, the track will be further scaled to only show that region of the ORF with annotated starts. This action will be indicated by adding "Zoomed" to the title. For starts, yellow indicates the location of called starts comprised solely of Glimmer/GeneMark auto-annotations, green indicates the location of called starts with at least 1 manual gene annotation.

Pham 194433 Report

This analysis was run 11/02/24 on database version 579.

Pham number 194433 has 15 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Colucci 103
- Track 2 : Engineer_51, Lozinak_50, Smoothie_51
- Track 3 : Belphegor_76
- Track 4 : DalanDe 10
- Track 5: Totinger 63, Plumbus 66
- Track 6 : Eleanor George_65, Firehouse 51_66, Mutaforma 13_69
- Track 7 : Ms6 60
- Track 8 : Byougenkin_63
- Track 9 : LittleShirley_63
- Track 10 : Guppsters 64

Summary of Final Annotations (See graph section above for start numbers):

The start number called the most often in the published annotations is 6, it was called in 5 of the 13 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Byougenkin_63, Guppsters_64, LittleShirley_63, Plumbus_66, Totinger_63,

Genes that have the "Most Annotated" start but do not call it:

Ms6_60,

Genes that do not have the "Most Annotated" start:

• Belphegor_76, Colucci_103, DalanDe_10, EleanorGeorge_65, Engineer_51, Firehouse51_66, Lozinak_50, Mutaforma13_69, Smoothie_51,

Summary by start number:

Start 4:

- Found in 1 of 15 (6.7%) of genes in pham
- Manual Annotations of this start: 1 of 13
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DalanDe_10 (DQ),

Start 6:

- Found in 6 of 15 (40.0%) of genes in pham
- Manual Annotations of this start: 5 of 13
- Called 83.3% of time when present
- Phage (with cluster) where this start called: Byougenkin_63 (F1), Guppsters_64 (F1), LittleShirley_63 (F1), Plumbus_66 (F1), Totinger_63 (F1),

Start 7:

- Found in 1 of 15 (6.7%) of genes in pham
- Manual Annotations of this start: 1 of 13
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Colucci_103 (AR),

Start 8:

- Found in 3 of 15 (20.0%) of genes in pham
- Manual Annotations of this start: 3 of 13
- Called 100.0% of time when present
- Phage (with cluster) where this start called: EleanorGeorge_65 (F1), Firehouse51_66 (F1), Mutaforma13_69 (F1),

Start 10:

- Found in 1 of 15 (6.7%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Belphegor_76 (DE),

Start 11:

- Found in 3 of 15 (20.0%) of genes in pham
- Manual Annotations of this start: 3 of 13
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Engineer_51 (CQ1), Lozinak_50 (CQ1), Smoothie_51 (CQ1),

Start 13:

- Found in 6 of 15 (40.0%) of genes in pham
- No Manual Annotations of this start.
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Ms6_60 (F1),

Summary by clusters:

There are 5 clusters represented in this pham: F1, CQ1, DE, AR, DQ,

Info for manual annotations of cluster AR:

•Start number 7 was manually annotated 1 time for cluster AR.

Info for manual annotations of cluster CQ1:

•Start number 11 was manually annotated 3 times for cluster CQ1.

Info for manual annotations of cluster DQ:

•Start number 4 was manually annotated 1 time for cluster DQ.

Info for manual annotations of cluster F1:

- •Start number 6 was manually annotated 5 times for cluster F1.
- •Start number 8 was manually annotated 3 times for cluster F1.

Gene Information:

Gene: Belphegor_76 Start: 56290, Stop: 56739, Start Num: 10

Candidate Starts for Belphegor_76:

(1, 56071), (2, 56167), (3, 56176), (10, 56290), (15, 56374), (18, 56431), (20, 56455), (22, 56479), (23, 56491),

Gene: Byougenkin_63 Start: 41134, Stop: 41616, Start Num: 6

Candidate Starts for Byougenkin_63:

(Start: 6 @ 41134 has 5 MA's), (13, 41218), (31, 41461), (34, 41500), (35, 41542),

Gene: Colucci_103 Start: 64172, Stop: 64684, Start Num: 7

Candidate Starts for Colucci 103:

(Start: 7 @64172 has 1 MA's), (14, 64262), (16, 64316), (27, 64463), (28, 64472), (30, 64481), (36, 64610),

Gene: DalanDe_10 Start: 6059, Stop: 6628, Start Num: 4

Candidate Starts for DalanDe_10:

(Start: 4 @ 6059 has 1 MA's), (5, 6083), (9, 6149), (12, 6173), (14, 6212), (23, 6356), (24, 6359), (26, 6392), (32, 6461),

Gene: EleanorGeorge_65 Start: 42284, Stop: 42745, Start Num: 8

Candidate Starts for EleanorGeorge_65:

(Start: 8 @ 42284 has 3 MA's), (19, 42458), (21, 42485), (27, 42569), (33, 42608), (37, 42737),

Gene: Engineer_51 Start: 31923, Stop: 32384, Start Num: 11

Candidate Starts for Engineer 51:

(Start: 11 @31923 has 3 MA's), (17, 32031), (20, 32070), (21, 32082), (25, 32130), (26, 32142), (29, 32178), (38, 32367), (39, 32370),

Gene: Firehouse51_66 Start: 45330, Stop: 45791, Start Num: 8

Candidate Starts for Firehouse51 66:

(Start: 8 @ 45330 has 3 MA's), (19, 45504), (21, 45531), (27, 45615), (33, 45654), (37, 45783),

Gene: Guppsters 64 Start: 40923, Stop: 41405, Start Num: 6

Candidate Starts for Guppsters 64:

(Start: 6 @40923 has 5 MA's), (13, 41007), (31, 41250), (34, 41289), (35, 41331),

Gene: LittleShirley_63 Start: 41739, Stop: 42221, Start Num: 6

Candidate Starts for LittleShirley_63:

(Start: 6 @ 41739 has 5 MA's), (13, 41823), (28, 42048), (31, 42066), (34, 42105), (35, 42147),

Gene: Lozinak 50 Start: 31978, Stop: 32439, Start Num: 11

Candidate Starts for Lozinak 50:

(Start: 11 @31978 has 3 MA's), (17, 32086), (20, 32125), (21, 32137), (25, 32185), (26, 32197), (29, 32233), (38, 32422), (39, 32425),

Gene: Ms6_60 Start: 36767, Stop: 37165, Start Num: 13

Candidate Starts for Ms6_60:

(Start: 6 @ 36683 has 5 MA's), (13, 36767), (31, 37010), (34, 37049), (35, 37091),

Gene: Mutaforma13_69 Start: 44640, Stop: 45101, Start Num: 8

Candidate Starts for Mutaforma13 69:

(Start: 8 @ 44640 has 3 MA's), (19, 44814), (21, 44841), (27, 44925), (33, 44964), (37, 45093),

Gene: Plumbus_66 Start: 41519, Stop: 42001, Start Num: 6

Candidate Starts for Plumbus_66:

(Start: 6 @ 41519 has 5 MA's), (13, 41603), (31, 41846), (34, 41885), (35, 41927),

Gene: Smoothie_51 Start: 31978, Stop: 32439, Start Num: 11

Candidate Starts for Smoothie_51:

(Start: 11 @31978 has 3 MA's), (17, 32086), (20, 32125), (21, 32137), (25, 32185), (26, 32197), (29, 32233), (38, 32422), (39, 32425),

Gene: Totinger_63 Start: 40465, Stop: 40947, Start Num: 6

Candidate Starts for Totinger_63:

(Start: 6 @ 40465 has 5 MA's), (13, 40549), (31, 40792), (34, 40831), (35, 40873),